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(54) Title: ANIMAL MODELS AND METHODS FOR SEPSIS

(57) Abstract: Methods for selecting a candidate drug for treating sepsis are disclosed. The methods involve labeling a sepsis-causing pathogen with a reporter and monitoring the progress of infection by detecting levels of the reporter in animals treated with test compounds or drugs. The comparisons may be made between experimental and control animals, as well as within a single animal or group of animals. Also disclosed is a method for predicting an expected time of death of an experimental animal in a model system of sepsis using data generated in the initial part of the experiment.

INTERNATIONAL SEARCH REPORT

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Minimum of TPC 7	documentation searched (classification system followed AO1K A61K C12Q	by classification sym	bols)		
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	ation searched other than minimum documentation to the	extent that such doc	cuments are inclu	ded in the fields	searched
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FIGUROUS (data base consulted during the International search (nan	e of data base and,	where practical,	search terms use	ed)
	ENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where appropriate	e, of the relevant par	ssages		Relevant to day
Χ					Relevant to daim No.
Λ	CONTAG C H ET AL: "PHOTONI	C DETECTION	V OF		1-5,7-15
	BACTERIAL PATHOGENS IN LIVI MOLECULAR MICROBIOLOGY, GB, B	NG HOSTS"			- 5,7 15
	OCTEMETATO (XFOKI)				
	vol. 18, no. 4, 1995, pages XP000578109	593-603,			
j	ISSN: 0950-382X				
,	cited in the application				
'	figures 2-5	• •			6
	CONTAG P R ET AL: "BIOLUMI!	dEcorum			
İ	INDICATOR IN LIVING MAMMALS"				1-5,7-15
	NATURE MEDICINE US NATURE PL	IRI TCUTNO /	CO.		
	vol. 4, no. 2, 1998, pages 2 XP000914588	45-247,	,	1	
1	ISSN: 1078-8956				
	cited in the application				
	page 246, column 1, paragrap	h 2		-	6
		-/			·
Further	documents are listed in the continuation of box C.				
	<u> </u>	X Pa	atent family memb	pers are listed in	annex.
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	defining the general state of the art which is not ad to be of particular relevance				ational filing date application but
earlier doca filing date	ument but published on or after the international	inventio	מונו מונו מוכיים	bunicible of (1160)	y underlying the
	which may throw doubts on priority claim(s) or ited to establish the publication date of another	cannot	nt of particular rel be considered no an inventive sten	ovence; the claim ovel or cannol be	med invention considered to ment is taken alone
document r	referring to an oral disclosure, upp.	Cannot	pe considered to	evance; the clair	ned invention
	ns published prior to the international filing date but	docume ments.	ent is combined w	MINOING BU IUNGU	ned invention dive step when the other such docu- o a person skilled
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of the actua	al completion of the international search		mailing of the inte		
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_	Fax: (+31-70) 340-3016				

INTERNATIONAL SEARCH REPORT

Intern. Inal Application No PCT/US 00/07296

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		PCT/US 00/07296		
Category s	Citation of document, with indication, where appropriate, of the relevant passages	To		
V		Relevant to claim No.		
Υ	WO 97 18841 A (UNIV LELAND STANFORD JUNIOR) 29 May 1997 (1997-05-29) cited in the application claims 9-12,14,16	1-5,7-15		
v		6		
Υ	ARNOLD L ET AL: "Predictive value of several signs of infection as surrogate markers for mortality in a neutropenic guinea pig model of Pseudomonas aeruginosa sepsis" LABORATORY ANIMAL SCIENCE, vol. 47, no. 6, December 1997 (1997-12), pages 617-623, XP000960981 abstract	6		
T	FRANCIS K ET AL: "Monitoring bioluminescent Staphylococcus aureus infections in living mice using a novel luxABCDE construct" INFECTION AND IMMUNITY, vol. 68, no. 6, June 2000 (2000-06), pages 3594-3600, XP002153182 the whole document	1-15		
	EP 0 864 648 A (SUNTORY LTD) 16 September 1998 (1998-09-16)	·		
		·		

INTERNATIONAL SEARCH REPORT

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Information on patent family members

Inten Inal Application No
PCT/US 00/07296

Patent document cited in search repor	t	Publication date	Patent family member(s)		Publication date
WO 9718841	Α	29-05-1997	CA	2237983 A	29-05-1997
			US	5650135 A	22-07-1997
			AT	193453 T	15-06-2000
			AU	4285096 A	11-06-1997
			DE	69517344 D	06-07-2000
•			EP	0861093 A	02-09-1998
			ES	2147621 T	16-09-2000
EP 0864648	Α	16-09-1998	WO	9812313 A	26-03-1998